TABLE A–2 TO SUBPART A OF PART 98—UNITS OF MEASURE CONVERSIONS

| To convert from | To | Multiply by |
|---|---|---|
| Kilograms (kg) | Pounds (lbs) | 2.20462 |
| Pounds (lbs) | Kilograms (kg) | 0.45359 |
| Pounds (lbs) | Metric tons | $4.53592 \times 10^{-4}$ |
| Short tons | Pounds (lbs) | 2,000 |
| Short tons | Metric tons | 0.90718 |
| Metric tons | Short tons | 1.10231 |
| Metric tons | Kilograms (kg) | 1,000 |
| Cubic meters ($m^3$) | Cubic feet ($ft^3$) | 35.31467 |
| Cubic feet ($ft^3$) | Cubic meters ($m^3$) | 0.028317 |
| Gallons (liquid, US) | Liters (l) | 3.78541 |
| Liters (l) | Gallons (liquid, US) | 0.26417 |
| Barrels of Liquid Fuel (bbl) | Cubic meters ($m^3$) | 0.15891 |
| Cubic meters ($m^3$) | Barrels of Liquid Fuel (bbl) | 6.289 |
| Barrels of Liquid Fuel (bbl) | Gallons (liquid, US) | 42 |
| Gallons (liquid, US) | Barrels of Liquid Fuel (bbl) | 0.023810 |
| Gallons (liquid, US) | Cubic meters ($m^3$) | 0.0037854 |
| Liters (l) | Cubic meters ($m^3$) | 0.001 |
| Feet (ft) | Meters (m) | 0.3048 |
| Meters (m) | Feet (ft) | 3.28084 |
| Miles (mi) | Kilometers (km) | 1.60934 |
| Kilometers (km) | Miles (mi) | 0.62137 |
| Square feet ($ft^2$) | Acres | $2.29568 \times 10^{-5}$ |
| Square meters ($m^2$) | Acres | $2.47105 \times 10^{-4}$ |
| Square miles ($mi^2$) | Square kilometers ($km^2$) | 2.58999 |
| Degrees Celsius ( °C) | Degrees Fahrenheit ( °F) | °C = (5⁄9) × ( °F − 32) |
| Degrees Fahrenheit ( °F) | Degrees Celsius ( °C) | °F = (9⁄5) × °C + 32 |
| Degrees Celsius ( °C) | Kelvin (K) | K = °C + 273.15 |
| Kelvin (K) | Degrees Rankine (°R) | 1.8 |
| Joules | Btu | $9.47817 \times 10^{-4}$ |
| Btu | MMBtu | $1 \times 10^{-6}$ |
| Pascals (Pa) | Inches of Mercury (in Hg) | $2.95334 \times 10^{-4}$ |
| Inches of Mercury (inHg) | Pounds per square inch (psi) | 0.49110 |
| Pounds per square inch (psi) | Inches of Mercury (in Hg) | 2.03625 |

## Subpart B [Reserved]

## Subpart C—General Stationary Fuel Combustion Sources

### §98.30 Definition of the source category.

(a) Stationary fuel combustion sources are devices that combust solid, liquid, or gaseous fuel, generally for the purposes of producing electricity, generating steam, or providing useful heat or energy for industrial, commercial, or institutional use, or reducing the volume of waste by removing combustible matter. Stationary fuel combustion sources include, but are not limited to, boilers, simple and combined-cycle combustion turbines, engines, incinerators, and process heaters.

(b) This source category does not include:

(1) Portable equipment, as defined in §98.6.

(2) Emergency generators and emergency equipment, as defined in §98.6.

(3) Irrigation pumps at agricultural operations.

(4) Flares, unless otherwise required by provisions of another subpart of 40 CFR part 98 to use methodologies in this subpart.

(5) Electricity generating units that are subject to subpart D of this part.

(c) For a unit that combusts hazardous waste (as defined in 40 CFR 261.3), reporting of GHG emissions is not required unless either of the following conditions apply:

(1) Continuous emission monitors (CEMS) are used to quantify $CO_2$ mass emissions.

(2) Any fuel listed in Table C–1 of this subpart is also combusted in the unit. In this case, report GHG emissions from combustion of all fuels listed in Table C–1 of this subpart.

### §98.31 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains one or more stationary fuel combustion sources and the facility meets

the applicability requirements of either §98.2(a)(1), §98.2(a)(2), or §98.2(a)(3).

### §98.32 GHGs to report.

You must report $CO_2$, $CH_4$, and $N_2O$ mass emissions from each stationary fuel combustion unit.

### §98.33 Calculating GHG emissions.

You must calculate $CO_2$ emissions according to paragraph (a) of this section, and calculate $CH_4$ and $N_2O$ emissions according to paragraph (c) of this section.

(a) *$CO_2$ emissions from fuel combustion.* Calculate $CO_2$ emissions by using one of the four calculation methodologies in this paragraph (a) subject to the conditions, requirements, and restrictions set forth in paragraph (b) of this section. If you co-fire biomass fuels with fossil fuels, report $CO_2$ emissions from the combustion of biomass separately using the methods in paragraph (e) of this section.

(1) *Tier 1 Calculation Methodology.* Calculate the annual $CO_2$ mass emissions for each type of fuel by using Equation C–1 of this section.

$$CO_2 = 1 \times 10^{-3} * Fuel * HHV * EF \qquad \text{(Eq. C-1)}$$

Where:

$CO_2$ = Annual $CO_2$ mass emissions for the specific fuel type (metric tons).

Fuel = Mass or volume of fuel combusted per year, from company records as defined in §98.6 (express mass in short tons for solid fuel, volume in standard cubic feet for gaseous fuel, and volume in gallons for liquid fuel).

HHV = Default high heat value of the fuel, from Table C–1 of this subpart (mmBtu per mass or mmBtu per volume, as applicable).

EF = Fuel-specific default $CO_2$ emission factor, from Table C–1 of this subpart (kg $CO_2$/mmBtu).

$1 \times 10^{-3}$ = Conversion factor from kilograms to metric tons.

(2) *Tier 2 Calculation Methodology.* Calculate the annual $CO_2$ mass emissions for each type of fuel by using either Equation C2a or C2c of this section, as appropriate.

(i) Equation C–2a of this section applies to any type of fuel listed in Table C–1 of the subpart, except for municipal solid waste (MSW). For MSW combustion, use Equation C–2c of this section.

$$CO_2 = 1 \times 10^{-3} * Fuel * HHV * EF \qquad \text{(Eq. C-2a)}$$

Where:

$CO_2$ = Annual $CO_2$ mass emissions for a specific fuel type (metric tons).

Fuel = Mass or volume of the fuel combusted during the year, from company records as defined in §98.6 (express mass in short tons for solid fuel, volume in standard cubic feet for gaseous fuel, and volume in gallons for liquid fuel).

HHV = Annual average high heat value of the fuel from all valid samples for the year (mmBtu per mass or volume). The average HHV shall be calculated according to the requirements of paragraph (a)(2)(ii) of this section.

EF = Fuel-specific default $CO_2$ emission factor, from Table C–1 of this subpart (kg $CO_2$/mmBtu).

$1 \times 10^{-3}$ = Conversion factor from kilograms to metric tons.

(ii) The minimum number of HHV samples for determining annual average HHV is specified (e.g., monthly, quarterly, semi-annually, or by lot) in §98.34. The method for computing the annual average HHV is a function of how frequently you perform or receive from the fuel supplier the results of fuel sampling for HHV. The method is specified in paragraph (a)(2)(ii)(A) or (a)(2)(ii)(B) of this section, as applicable.

(A) If the results of fuel sampling are received monthly or more frequently, then the annual average HHV shall be